

REMARKS

Claims 1-9, 12-19, 22-29, 31-40, 58, 59, and 67-81 are pending in the application. Claims 10, 11, 20, 21, 30, 41-57, and 60-66 were previously canceled. Claims 67-81 are newly added herein. Claims 1, 29, 58, 68, 70, 72, 73, and 78 are the only independent claims.

Specification

The specification has been amended to provide antecedent basis for claim language newly introduced herein. The new language finds support in the disclosure as a whole, particularly in view of the intent and purpose of the invention and the ordinary circumstances of use, as would be understood by one skilled in the art,

Claims Rejections - 35 U.S.C. § 101

Claims 1-9, 12-19, 22-29, 31-40, 58, and 59 stand rejected under 35 U.S.C. § 101 because the claimed invention is purportedly not supported by either a specific, substantial and credible utility or a well-established utility.

The Examiner maintains that Applicant's method claims cite no specific benefit. The benefits of reducing, preventing or inhibiting are interpreted by the Examiner as too sweeping in context to yield any specific result. The Examiner cites a case holding that "[w]hen it is speculative as to whether the invention achieves the asserted utility, then the invention lacks a specific utility."

The Examiner additionally states that a substantial utility requires a "real world" use and that utilities that require carrying out further research to identify or reasonably confirm such use do not have a substantial utility. The Examiner contends that Applicant's disclosure provides no detail to substantiate the utility, thus suggesting that additional research is required.

The Examiner further holds that credibility is lacking, basing this holding on Applicant's disclosure of a number of variables regarding radiation and treatment site,

many with wide ranges. The Examiner maintains that the breadth of Applicant's disclosure makes it speculative as to whether the invention achieves the asserted utility.

According to the Examiner, the "sweeping range of variables raises the question of an ability to produce the same result on a consistent basis. No evidence is provided that the results can be assured."

(A) Examiner Has Not Made *Prima Facie* Case

Applicant respectfully traverses the Examiner's rejection of claims 1-9, 12-19, 22-29, 31-40, 58, and 59 under 35 U.S.C. § 101 and asserts that the claimed invention is supported by a specific, substantial and credible utility.

Applicant traverses the Examiner's rejection of claims 1-9, 12-19, 22-29, 31-40, 58, and 59 under 35 U.S.C. § 101 in part because the Examiner has not made a *prima facie* case of lack of utility. More particularly, the Examiner has not made a *prima facie* case that the claimed invention is not supported by either a specific, substantial and credible utility or a well-established utility. The Examiner has provided no evidence on which to base his assertion that Applicant's claimed invention has no established utility and therefore has failed to meet the minimum requirements for a proper rejection.

(1) The Examiner contends that Applicant's method claims cite no specific benefit. The benefits of "reducing, preventing or inhibiting" are interpreted by the Examiner as too sweeping in context to yield any specific result.

Contrary to the Examiner's contention, Applicant claims do recite a specific benefit. Applicant's claims describe a method that has a beneficial effect on the incidence or probability of skin cancer. This is a specific result, in contrast to, for example, the application of light energy for unspecified beneficial purposes, or to provide an opportunity to determine possible desirable results. Applicant describes the results in his disclosure and his claims. As stated at MPEP 2107.01,

A "specific utility" is specific to the subject matter claimed. This contrasts with a general utility that would be applicable to the broad class of the invention. Office

personnel should distinguish between situations where an applicant has disclosed a specific use for or application of the invention and situations *where the applicant merely indicates that the invention may prove useful without identifying with specificity why it is considered useful.* (Emphasis added,)

(2) The Examiner implies that it is speculative as to whether Applicant's invention achieves the asserted utility. However, Applicant does not speculate as to the reducing, reversing, or inhibiting damage to a skin. Instead, it is the Examiner who speculates that Applicant's asserted utility is speculative. The Examiner provides no documentary evidence and no reasoned scientific basis in support of his position.

(3) The Examiner states that a substantial utility requires a "real world" use and that utilities that require carrying out further research to identify or reasonably confirm such use do not have a substantial utility.

Contrary to the Examiner's position, the reduction, reversal or inhibition of skin cancer is a "real world" use. As stated at MPEP 2107.01, a therapeutic method of treating a known or newly discovered disease defines a "real world" context of use. Applicant's method pertains to a method of reducing or inhibiting the onset of a known disease (skin cancer and precancerous conditions) and thus defines a "real world" context of use. Applicant's invention is not a method of treating an unspecified disease or condition, which would lack a substantial or "real world" context of use, as set forth at MPEP 2107.01. Applicant has identified a reasonable use for the invention that can be viewed as providing a public benefit should be accepted as sufficient, at least with regard to defining a "substantial" utility. MPEP 2107.01.

There is nothing in the record, other than the Examiner's assertions, that suggest that further research is required to identify or reasonably confirm the usefulness that Applicant discloses.

(4) The Examiner contends that Applicant's disclosure provides no detail to substantiate the utility, thus suggesting that additional research is required.

The Examiner provides no documentary support or scientific reasoning to suggest that Applicant's invention does not have the utility described in the application. The Examiner's rejection is unsubstantiated.

(5) The Examiner further holds that credibility is lacking, basing this holding on Applicant's disclosure of a number of variables regarding radiation and treatment site, many with wide ranges. The Examiner maintains that the breadth of Applicant's disclosure makes it speculative as to whether the invention achieves the asserted utility.

One skilled in the art of light application to a skin surface for achieving therapeutic or cosmetically desirable results would find Applicant's utility to be quite credible. The Examiner has provided no evidence and no description or explanation as to who is skilled in this art. Applicant points to the prior art cited by the Examiner to show that the range of useful benefits of dermatological light application is broad. Those skilled in this art, particularly including dermatologists would find Applicant's claimed utility quite credible. Moreover, those skilled in the art would not doubt Applicant's utility on account of the number of variables and the wide range of values. The many variable and their ranges are inherent or endemic to this art.

(6) According to the Examiner, the "sweeping range of variables raises the question of an ability to produce the same result on a consistent basis. No evidence is provided that the results can be assured."

Applicant respectfully contravenes this assertion by the Examiner that a large number of variables raises any question as to results. The Examiner has provided no evidence that one skilled in the art would doubt Applicant's claimed utility based on the "sweeping range of variables."

(B) MPEP Requires Withdrawal of Lack of Utility Rejection

Applicant respectfully traverses the rejection of the claims under 35 U.S.C. § 101 in part because the Examiner has failed to follow the guidelines set forth in the Manual of Patent Examining Procedure.

(1) For instance, MPEP 2107(B)(1) states that “[i]f the applicant has asserted that the claimed invention is useful for any particular practical purpose (i.e., it has a “specific and substantial utility”) and the assertion would be considered credible by a person of ordinary skill in the art, do not impose a rejection based on lack of utility.” Applicant has asserted that the invention will be useful for reducing the incidence or probability of skin cancer. This result is not only practical but highly desirable. The benefits of Applicant’s invention are specific (a prophylactic improvement in skin condition) and substantial (reduction of cancer). One of ordinary skill in the art, for instance, a dermatologist familiar with the many beneficial effects of pulsed light energy, would have no trouble whatsoever with the credibility of Applicant’s assertion of usefulness. (See the prior art references cited by the Examiner, particularly U.S. Patent No. 6,676,655 to McDaniel, with respect to the many beneficial effects of light treatment.) Pursuant to MPEP 2107(B)(1), the Examiner’s rejection based on lack of utility is improper.

(2) The Examiner maintains that Applicant’s invention has no credible utility. Applicant traverses the Examiner’s rejection in part for the reason that the Examiner has not made a *prima facie* case that Applicant’s claimed invention lacks credible utility. Credibility is assessed from the perspective of one of ordinary skill in the art in view of the disclosure and any other evidence of record (e.g., test data, affidavits or declarations from experts in the art, patents or printed publications) that is probative of the applicant’s assertions. MPEP 2107(B)(1). The Examiner has provided no evidence in support of his assertion of lack of credibility. Applicant points to the broad range of beneficial effects of light and asserts that one of ordinary skill in the art would find the utility of Applicant’s invention to be convincing and credible.

The Examiner further holds that credibility is lacking, basing this holding on Applicant’s disclosure of a number of variables regarding radiation and treatment site, many with wide ranges. Those skilled in the art of the therapeutic effects of light energy

are accustomed to such ranges. Patents in this field typically recite parameter ranges as broad as Applicant's. See, for instance, U.S. Patent No. 6,676,655 to McDaniel.

(3) As stated in MPEP 2107(C):

Whenever possible, the examiner should provide documentary evidence regardless of publication date (e.g., scientific or technical journals, excerpts from treatises or books, or U.S. or foreign patents) to support the factual basis for the prima facie showing of no specific and substantial credible utility. If documentary evidence is not available, the examiner should specifically explain the scientific basis for his or her factual conclusions.

Here, the Examiner has provided no documentary evidence. Moreover, the Examiner has provided no scientific basis for his conclusory statements that Applicant's invention does not work. The Examiner maintains only that Applicant's disclosure is so broad that it suggests a lack of utility. The Examiner's provides no explanation as to why Applicant's invention would not achieve a reduction in the incidence or probability of contracting skin cancer.

(4) MPEP 2107(D) cautions Office personnel "that they must treat as true a statement of fact made by an applicant in relation to an asserted utility, unless countervailing evidence can be provided that shows that one of ordinary skill in the art would have a legitimate basis to doubt the credibility of such a statement."

Applicant maintains in his disclosure that the application of light energy to a skin surface at least reduces the likelihood that that skin surface will be affected by cancer. Contrary to MPEP 2107(D), the Examiner provides absolutely no countervailing evidence that shows that one of ordinary skill in the art would have a legitimate basis to doubt the credibility of Applicant's representation. The Examiner ignores the prior art evidencing the multifarious beneficial effects of light application to skin surfaces. In view of this prior art, one of ordinary skill in the art would have no difficulty ascribing to Applicant's claimed utility.

Claims Rejections - 35 U.S.C. § 112

Claims 1-9, 12-19, 22-29, 31-40, 58, and 59 stand rejected under 35 U.S.C. § 112, first paragraph. The Examiner maintains that since the claimed invention is not supported by a specific, concrete and credible asserted utility or a well established utility, one skilled in the art would not know how to use the claimed invention. The wide ranges for the many parameters of the light source coupled with the variables of the treatment site would purportedly require excessive experimentation of one skilled in the art to use the invention.

In response to the rejection of claims 1-9, 12-19, 22-29, 31-40, 58, and 59 under 35 U.S.C. § 112, first paragraph, Applicant repeats the observations and arguments made above with respect to the rejection under 35 U.S.C. § 101. Applicant thus respectfully contravenes the rejection of claims 1-9, 12-19, 22-29, 31-40, 58, and 59 under 35 U.S.C. § 112, first paragraph, for the reasons stated hereinabove with respect to the rejection under 35 U.S.C. § 101.

Claims Rejections - 35 U.S.C. § 103

Claims 1-9, 12-19, 24, 29-37, and 40 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,514,243 to Eckhouse et al. (“Eckhouse”).

Claims 1 and 25-28 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,676,655 to McDaniel.

Claims 22, 23, 38, 39, 58, and 59 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Eckhouse et al. in view of U.S. Patent No. 6,730,113 to Eckhardt et al. (“Eckhardt”).

The Invention Applicant’s invention pertains to a prophylactic method of applying optical radiation to skin surfaces to reduce, if not eliminate, the likelihood that those skin surfaces will be damaged by exposure to a source of Xray or ultraviolet radiation. Essentially the sole criterion for determining whether light energy is to be applied to the skin surface is whether the individual is exposed to such radiation. In prior

art applications of pulsed light energy (laser or incoherent), the light energy is applied only to rectify an undesirable visible skin condition, such as visible blood vessels, wrinkles, freckles, or hair. Nothing in the prior art suggests the application of light energy to skin that has no undesirable condition. Nothing in the prior art suggests the application of light energy to skin that has no visible damage from exposure to a source of Xray or ultraviolet radiation such as the sun.

Because the Applicant's sole criterion for determining whether light energy is to be applied to the skin surface is whether the individual is exposed to a source of Xray or ultraviolet radiation, light energy is reapplied to a target skin surface regardless of the condition of that skin surface, regardless of whether there is any detectible damage to that skin surface, and regardless of whether the skin surface has any undesirable condition whatsoever. Accordingly, Applicant's process is in contrast to all prior art methods of skin treatment with light energy, inasmuch as all prior methods apply light to a skin surface only if there is a detectible undesirable condition on that skin surface. The undesirable condition may be discolorations of the skin (sunspots, freckles, etc.), visible blood vessels, or hair. Pursuant to prior art methods, once light is applied to a skin surface in a treatment session, further treatment is undertaken only if subsequent inspection reveals an undesirable skin condition. In the absence of an undesirable skin condition, no light energy is applied.

Claim 68 Pursuant to the above observations, Applicant submits new claim 68 herein and contends that claim 68 distinguishes over the prior art. As set forth in claim 68, a skin treatment method comprises periodically applying, in temporally spaced treatment sessions, electromagnetic radiation to a skin surface of an individual to at least partially prevent, reverse, or inhibit damage to the skin caused by exposure of the individual to Xray or ultraviolet radiation. The electromagnetic radiation is applied to the skin surface in each of the treatment sessions prior to, during or after the exposure of the

individual to Xray or ultraviolet radiation. The electromagnetic radiation is applied to the skin surface in the absence of any visible undesirable condition along the skin surface.

None of the references of record discloses or suggests the application of electromagnetic radiation to a skin surface in the absence of any visible undesirable condition along that skin surface. The prior art as a whole and in its individual teachings direct those skilled in the art to apply light to a skin surface only if there is a visible condition that one desires to rectify, change, or eliminate. The undesirable condition that determines the type of skin surface to which radiant or light energy is applied is typically a cosmetic condition, which bears no life-threatening import. In contrast to most applications of light energy, Applicant's invention is directed to inhibiting or reducing the likelihood of a condition that can have life-threatening consequences. This is a substantial result, as any dermatologist would agree.

The disclosure of Eckhouse is illustrative of the state of the art. Eckhouse makes the following observations as to the state of the art:

It is known in the prior art to use electromagnetic radiation in medical applications for therapeutic uses such as treatment of skin disorders. Col. 1, lines 39-41.

Two skin conditions which may be treated by laser radiation are external skin irregularities such as local differences in the pigmentation or structure of the skin, and vascular disorders lying deeper under the skin which cause a variety of skin abnormalities including port wine stains, telangiectasias, leg veins and cherry and spider angiomas. Col. 1, lines 54-61.

Accordingly, a wide band electromagnetic radiation source that covers the near UV and the visible portion of the spectrum would be desirable for treatment of external skin and vascular disorders. The overall range of wavelengths of the light source should be sufficient to optimize treatment for any of a number of applications. Such a therapeutic electromagnetic radiation device should also be capable of providing an optimal wavelength range within the overall range for the specific disorder being treated. Col. 2, lines 47-55.

Thus, the prior art, as characterized by Eckhouse is directed to the rectification or improvement of undesirable skin conditions. Eckhouse itself is directed to a process for removing hair, an undesirable condition in the context of the Eckhouse disclosure.

McDaniel also is directed to the treatment of an undesirable skin condition (hair) and explains that light is used to treat undesirable skin conditions:

Low-intensity light therapy is an emerging field of study wherein light emitting diodes and other emitters of low-intensity electromagnetic radiation are used to treat various medical conditions such as acne, hair growth stimulation, hair growth inhibition, scar reduction and removal, wrinkle reduction, etc. Col. 1, lines 27-33.

Claim 70 Applicant tenders new claim 70 herein and maintains that claim 70 distinguishes over the prior art. As set forth in claim 70, a skin treatment method comprises, without regard to visible skin conditions along a skin surface of an individual, applying electromagnetic radiation to the skin surface in a first treatment session to at least partially prevent, reverse, or inhibit damage to the skin caused by exposure of the individual to Xray or ultraviolet radiation, and subsequently, without regard to visible skin conditions along the skin surface, applying electromagnetic radiation to the skin surface in a second treatment session to at least partially prevent, reverse, or inhibit damage to the skin caused by exposure of the individual to Xray or ultraviolet radiation.

Known prior art applies light to a skin surface only after that skin surface has been inspected and an undesirable skin condition detected. Light (radiant, electromagnetic) energy is applied to the skin surface for purposes of removing the detected undesirable skin condition. For example, the teachings of Eckhouse and McDaniel are directed to the removal of unwanted hair. In each case, a skin surface is

inspected to determine the presence of hair. If hair is found, the disclosed process is carried out to remove the hair. If no undesirable condition is detected – no hair is found – then light is not applied to the subject skin surface.

Pursuant to claim 70, electromagnetic radiation is applied to a skin surface without regard to visible skin conditions along the skin surface, to at least partially prevent, reverse, or inhibit damage to the skin caused by exposure of the individual to Xray or ultraviolet radiation. This method is contrary to the prior art, which teaches that the application of electromagnetic radiation or light energy to a skin surface is dependent on the condition of the skin surface, thus requiring an inspection of the skin surface and a detection of an unwanted skin condition.

Claim 72 Applicant proffers new claim 72 herein and asserts that claim 72 distinguishes over the prior art. As set forth in claim 72, a skin treatment method comprises determining a degree of exposure of a skin surface to Xray or ultraviolet radiation, and subsequently applying an effective amount of electromagnetic radiation, in accordance with the determined degree of Xray or ultraviolet exposure, to a skin surface to at least partially prevent, reverse, or inhibit damage to the skin caused by exposure to the Xray or ultraviolet radiation, the applying of the electromagnetic radiation being effectuated in the absence of any visible Xray or ultraviolet radiation damage along the skin surface.

None of the references cited by the Examiner, whether considered alone or together with one or more other references, either discloses or suggests such a method wherein one determines a degree of exposure of a visibly undamaged skin surface to Xray or ultraviolet radiation and subsequently applies an effective amount of

electromagnetic radiation to the skin surface, in accordance with the determined degree of Xray or ultraviolet exposure, to at least partially prevent, reverse, or inhibit damage to the skin caused by exposure to the Xray or ultraviolet radiation. The prior art is concerned solely with treating skin that has a visible or otherwise detectable condition that is considered undesirable. The prior art does not suggest measuring an exposure level where skin appears undamaged.

Claim 29 Applicant respectfully traverses the rejection of claim 29 under 35 U.S.C. § 103(a) and maintains that claim 29 distinguishes over the prior art. As set forth in claim 29, a prophylactic skin treatment method comprises (a) generating a predetermined number of pulses of electromagnetic radiation each having a predetermined electromagnetic spectrum, (b) applying the pulses of electromagnetic radiation to an individual's skin surface, the pulses having at least one predetermined pulse duration, and a predetermined total energy, (c) exposing the individual to Xray or ultraviolet radiation, the exposing of the individual to Xray or ultraviolet radiation occurring within a predetermined period of time of the applying of the pulses to the skin surface, and (d) at least in part owing to the applying of the pulses to the skin surface, reducing or preventing damage to the tissues of the skin surface arising from the exposing of the individual to Xray or ultraviolet radiation.

None of the reference cited by the Examiner, whether viewed individually or collectively, either discloses or suggests the method of claim 29, particularly the exposing an individual to Xray or ultraviolet radiation within a predetermined period of time of applying of pulses of electromagnetic radiation to the skin surface. The Examiner rejects claim 29 over prior art evidently because individuals subjected to pulsed light for

dermatological repair purposes inevitably become exposed to solar radiation and therefore to potentially damaging Xray and ultraviolet radiation. However, the prior art does not teach or suggest that the exposure to the Xray or ultraviolet source occur with a *predetermined period of time* of the application to electromagnetic radiation pulses. Pursuant to the prior art, the exposure to an Xray or ultraviolet source and the application of light pulses occur at random or arbitrary times relative to one another.

Applicant's invention as set forth in claim 29 is particularly, but not exclusively, useful at locales and times that the prior art would never consider feasible or appropriate, such as tanning salons, beaches, swimming pools, or spas, as set forth in dependent claim 29. Here the application of pulsed light energy would necessarily occur within a predetermined period of an individual's exposure to an ultraviolet source such as the sun. It is in such locales that applicant's invention provides the greatest benefit.

Claim 73 Applicant provides new claim 73 herein and avers that claim 73 distinguishes over the prior art. As set forth in claim 73, a skin treatment method comprising applying an effective amount of electromagnetic radiation to a skin surface to at least partially prevent, reverse, or inhibit damage to the skin caused by exposure to Xray or ultraviolet radiation. The electromagnetic radiation is applied to the skin surface on at least one occasion prior to, during or after the exposure of the individual to Xray or ultraviolet radiation. The electromagnetic radiation is applied to the skin surface in the absence of any visible Xray or ultraviolet radiation damage along the skin surface. The electromagnetic radiation is applied to the skin surface within a predetermined interval of the exposure of the skin surface to Xray or ultraviolet radiation.

Claim 73 is patentable for the reasons set forth above with reference to claim 29. Claim 73 differs from claim 29 in part because claim 73 makes it clear that applicant's method may be followed where there is no visible Xray or ultraviolet radiation damage along the subject skin surface.

Claim 1 Applicant has amended claim 1 herein and asserts that claim 1 as so amended distinguishes over the prior art. As set forth in amended claim 1, a skin treatment method comprises applying electromagnetic radiation to a skin surface of an individual in a first treatment session to at least partially prevent, reverse, or inhibit damage to the skin caused by exposure of the individual to a source of Xray or ultraviolet radiation, the applying of the electromagnetic radiation to the skin surface being effectuated prior to, during or after the exposure of the individual to the source of Xray or ultraviolet radiation. The electromagnetic radiation is applied to the skin surface in the absence of any visible undesirable condition along said skin surface. Prior to detecting any substantial visible change in the skin surface, electromagnetic radiation is subsequently applied in a second treatment session to the skin surface to at least partially prevent, reverse, or inhibit damage to the skin caused by exposure to Xray or ultraviolet radiation.

Nothing in the prior art teaches or suggests the application of pulsed electromagnetic radiation or light energy to a skin surface in the absence of an undesirable condition along the skin surface. The prior art teaches solely that light application is to be used to rectify skin disorders or to change undesirable conditions such as the presence of absence of hair. Nothing in the prior art suggests the use of light to at

least partially prevent, reverse, or inhibit damage to the skin caused by exposure of the individual to a source of Xray or ultraviolet radiation.

Eckhouse and McDaniel are directed primarily to the removal of unwanted hair. Other prior art may talk about growing hair or stimulating hair growth. These are opposite sides of the same coin. There is an unwanted condition that is to be rectified by the application of light pulses. In contrast, in applicant's invention as set forth in claim 1, light energy is applied to a skin surface to maintain that skin surface and prevent change towards an undesirable condition.

Claim 58 Applicant respectfully traverses the rejection of claim 58 under 35 U.S.C. § 103(a) and maintains that claim 58 distinguishes over the prior art. Applicant has amended claim 58 to return claim 58 nearly to its original incarnation. As set forth in amended claim 58, a light treatment method comprises generating light of a selected spectral composition, directing the light towards a skin surface, and thereafter applying a marker film to the skin surface at locations where the light has been applied to the skin surface.

Applicant respectfully traverses the Examiner's rejection of claim 58 under 35 U.S.C. § 103(a) as being unpatentable over Eckhouse in view of Eckhardt. Applicant traverses the rejection on the grounds that there is no motivation provided in the references for the combination as relied on by the Examiner. Eckhardt teaches a method for determining the transmissivity of at least a portion of a bandage to ultraviolet light, for sterilizing or disinfecting a region underneath a bandage on a patient, for sterilizing or disinfecting a region of tissue of a patient. There is no reason known from the references of record to combine this teaching with those of Eckhouse.

Even if there were motivation to combine Eckhardt with Eckhouse, the combination does not arrive at or suggest the invention as set forth in claim 58. Eckhardt requires the application of a UV-sensitive composition *before* the application of (UV) light. Applicant claims the application of a marker film to a skin surface *after* the application of light to the skin surface.

Claim 78 Applicant submits new claim 78 herein and contends that claim 78 distinguishes over the prior art. As set forth in claim 78, a skin treatment method comprising applying electromagnetic radiation to a skin surface of an individual to at least partially prevent, reverse, or inhibit damage to the skin caused by exposure of the individual to Xray or ultraviolet radiation, the applying of the electromagnetic radiation to the skin surface being effectuated prior to, during or after the exposure of the individual to Xray or ultraviolet radiation. The electromagnetic radiation is so defined by parameters including total energy, pulse number, pulse duration, and electromagnetic spectrum, that the electromagnetic radiation is absorbed by endogenous chromophores in the epidermis and by chromophores in underlying tissues, to thereby stimulate a healing response and a release of tissue substances without permanently damaging the epidermis and the underlying tissues.

None of the references of record, whether considered singly or in combination, either discloses or suggests the method of claim 78 wherein electromagnetic radiation applied to a skin surface to at least partially prevent, reverse, or inhibit damage to the skin caused by exposure of the individual to Xray or ultraviolet radiation is so defined by parameters including total energy, pulse number, pulse duration, and electromagnetic spectrum, that the electromagnetic radiation is absorbed by endogenous chromophores in

the epidermis and by chromophores in underlying tissues, to thereby stimulate a healing response and a release of tissue substances without permanently damaging the epidermis and the underlying tissues.

The claim amendments, if any, made herein are made without prejudice to applicants' right to pursue additional subject matter in a separate continuation or divisional application.

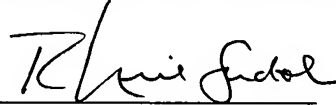
Conclusion

For the foregoing reasons, independent claims 1, 29, 58, 68, 70, 72, 73, and 78 as well as the claims dependent therefrom, are deemed to be in condition for allowance. An early Notice to that effect is earnestly solicited.

Should the Examiner believe that direct contact with applicant's attorney would advance the prosecution of this application, the Examiner is invited to telephone the undersigned at the number below.

Respectfully submitted,

COLEMAN SUDOL SAPONE, P.C.

By: 

R. Neil Sudol
Reg. No. 31,669

714 Colorado Avenue
Bridgeport, CT 066-05-1601
(203) 366-3560

Dated: July 1, 2005